



7fw

PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Application No.: 10/772,518
Filed: February 5, 2004
Inventor(s):
Robert E. Dye, Darshan K. Shah,
Steven W. Rogers, Gregory C.
Richardson, and Dean A. Luick

Title: GRAPHICAL
PROGRAMMING SYSTEM
WITH BLOCK DIAGRAM
EXECUTION AND
DISTRIBUTED USER
INTERFACE DISPLAY

§ Examiner: Unknown
§ Group/Art Unit: 2122
§ Atty. Dkt. No: 5150-38605
§
§
§
§
§
§
§
§
§
§

I hereby certify that this correspondence is being deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on the date indicated below.

Jeffrey C. Hood

Jeffrey C. Hood

Signature

6/26/2006

Date

INFORMATION DISCLOSURE STATEMENT

Mail Stop Amendment
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

Applicant requests consideration of ☒ the references listed on the attached Form PTO-1449 and/or ☐ the additional information identified below in paragraph 3. This application is a continuation of U.S. patent application Serial No. 09/617,600 titled "Graphical Programming System with Distributed Block Diagram Execution and User Interface Display" filed June 13, 2000, whose inventors were Robert Dye, Darshan Shah, Steve Rogers, Greg Richardson, and Dean A. Luick, and is now U.S. Patent No. 6,802,053. A copy of each reference listed on the Form PTO-1449 was submitted previously with the above-identified patent application, to which the current application claims benefit of priority, and therefore a copy of each reference listed on the enclosed PTO 1449 is not included. A copy of the reference A1 is enclosed.

1. This Information Disclosure Statement is submitted:

- a. ☐ within 3 months of the filing date of a national application other than a continued prosecution application under § 1.53(d);
☐ within 3 months of the date of entry of the national stage as set forth in § 1.491 in an International application;
☒ before the mailing date of a first Office Action on the merits; or
☐ before the mailing of a first Office Action after the filing of a request for continued examination under § 1.114.
- b. ☐ after the events of above paragraph 1a and prior to the mailing date of a final Office Action or Notice of Allowance, and thus: ☐ the certification of paragraph 2 below is provided, or ☐ a fee of \$180.00 is enclosed below.
- c. ☐ after the mailing date of a final Office Action or a Notice of Allowance and prior to payment of the issue fee, and thus: the certification of paragraph 2 below is provided and a fee of \$180.00 is enclosed below.
2. It is hereby certified:
- ☐ that each item of information contained in this Information Disclosure Statement was cited in a communication from a foreign patent office in a counterpart foreign application not more than three months prior to the filing of the Statement, or
- ☐ that no item of information contained in the Information Disclosure Statement was cited in a communication from a foreign patent office in a counterpart foreign application or, to the knowledge of the person signing the certification after making reasonable inquiry, was known to any individual designated in § 1.56 (c) more than three months prior to the filing of the Statement.
3. ☐ Consideration of the following additional information (including any co-pending or abandoned U.S. applications, prior uses and/or sales, etc.) is requested:
4. For each non-English language reference listed on the attached Form PTO-1449:
- ☐ reference is made to an English language translation (abstract) submitted herewith, and/or
- ☐ reference is made to a foreign patent office search report (in the English language) submitted herewith, and/or
- ☐ reference is made to an English language translation of a foreign patent office search report submitted herewith, and/or
- ☐ reference is made to the concise explanation contained in the specification of the present application at page(s) _____, and/or
- ☐ reference is made to the concise explanation set forth below:

5. ☐ Applicant also offers the following comments for the Examiner's consideration:
6. ☐ Also enclosed is a copy of a foreign search report citing these references.
7. ☐ The listed documents were brought to the attention of the Applicant(s) after payment of the issue fee in the captioned case. The documents were cited in a communication from a foreign patent office in a counterpart foreign application not more than three months prior to the filing of this Information Disclosure Statement. Applicant(s) request this Information Disclosure Statement and attached Form PTO-1449 be placed in the file of the captioned application.
8. ☐ Applicant(s) requests that the Information Disclosure Statement and attached Form PTO-1449 and references, which are being filed before the grant of the patent and pursuant to 37 C.F.R. § 1.97(i), be placed in the file of the captioned application.

The Commissioner is hereby authorized to charge any fees which may be required or credit any overpayment to Meyertons, Hood, Kivlin, Kowert & Goetzel PC, Deposit Account No. 50-1505/5150-38605/JCH.

Respectfully submitted,



Jeffrey C. Hood
Reg. No. 35,198
Attorney for Applicant(s)

MEYERTONS HOOD KIVLIN KOWERT & GOETZEL PC
P. O. Box 398
Austin, Texas 78767
(512) 853-8800

Date: 6/20/2006

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449/PTO -Modified

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(Use as many sheets as necessary)

Complete if Known

Application Number	10/772,518
Confirmation No.:	5410
Filing Date:	February 5, 2004
First Named Inventor:	Robert E. Dye
Art Unit:	2122
Examiner Name:	Unknown
Attorney Docket Number:	5150-38605

U. S. PATENT DOCUMENTS

Examiner Initials*	Cite No. ¹	Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number-Kind Code (if known)			
		US-			
		US-			
		US-			

FOREIGN PATENT DOCUMENTS

[illegible]

Examiner Signature		Date Considered	
-----------------------	--	-----------------	--

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. ¹Applicant's unique citation designation number (optional).



PTO/SB/08A (07-05) Modified
 Approved for use through 07/31/2006. OMB 0651-0031
 U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE
 Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

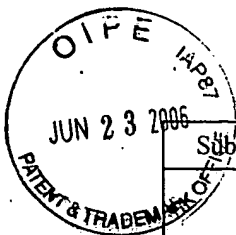
Substitute for form 1449/PTO Modified		<i>Complete if Known</i>	
INFORMATION DISCLOSURE STATEMENT BY APPLICANT <i>(Use as many sheets as necessary)</i>		Application Number	10/772,518
		Confirmation No.:	5410
		Filing Date:	February 5, 2004
		First Named Inventor:	Robert E. Dye
		Art Unit:	2122
		Examiner Name:	Unknown
		Attorney Docket Number:	5150-38605

NON PATENT LITERATURE DOCUMENTS

Examiner Initials*	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, (page(s), volume-issue number(s), publisher, city and/or country where published.	Check if English Translation is attached
		DE COSTER, GRAPE-II: An Introduction [online]. Automatic Control and Computer Architectures Department. Katholieke Universiteit Leuven, Belgium, February 22, 1996 [retrieved October 6, 1999] Retrieved from the Internet @ http://www.esat.kuleuven.ac.be/acca	<input type="checkbox"/>
		COLLAMATI, et al. "Induction Machine stator Fault On-line Diagnosis Based on LabVIEW Environment", Mediterranean Electrotechnical Conference, Vol. 1, pg. 495-498, May 1996.	<input type="checkbox"/>
		SPOELDER et al., "Virtual Instrumentation: A Survey of Standards and Their Interrelation", Proc. IEEE Instr. and Measurement Tech. Conf., Vol. 1, pp. 676-681, May 1997.	<input type="checkbox"/>
		SRINIVASAN et al., "LabVIEW program Design for On-Line Data Acquisition and Predictive Maintenance", Proc. Of the 30th Southeastern Symp. On System Theory, pp. 520-524, March 1998.	<input type="checkbox"/>
		WAHIDANABANU, et al., "Virtual Instrumentation with Graphical Programming for Enhanced Detection and Monitoring of Partial Discharges", Proc. Electrical Insulation Conf. 1997, pp. 291-296, September 1997.	<input type="checkbox"/>
		"Choosing Block-Diagram Tools for DSP Design", http://www.bdti.com/articles/info_dspmt95blockdiagram.htm, May 9, 2003, pgs. 1-7.	<input type="checkbox"/>
		Real-Time Workshop for Use with Simulink, User's Guide, May 1994, 229 pages.	<input type="checkbox"/>
		Guide to Rapid Prototyping with Simulink, Real-Time Workshop and dSPACE, 1995, 16 pages.	<input type="checkbox"/>
		Real-Time Interface to Simulink, RTI 30, User's Guide, 1995, 125 pages.	<input type="checkbox"/>
		KEVIN J GORMAN and KOUROSH J. RAHNAMAI, "Real-Time Data Acquisition and Controls Using MatLAB", 1995, 4 pages.	<input type="checkbox"/>
		SPW - MatLAB Co-Simulation Interface Product Data Sheet, 1996, 2 pages.	<input type="checkbox"/>
		Signal Processing WorkSystem, MatLAB Interface User's Guide, Oct. 1995, 72 pages.	<input type="checkbox"/>

Examiner Signature		Date Considered	
-----------------------	--	-----------------	--

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to application. ¹Applicant's unique citation designation number (optional).



Substitute for form 1449/PTO Modified

Complete if Known

**INFORMATION DISCLOSURE
STATEMENT BY APPLICANT**

(Use as many sheets as necessary)

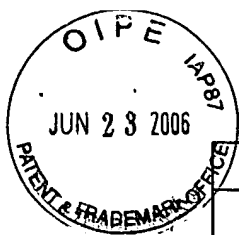
Application Number	10/772,518
Confirmation No.:	5410
Filing Date:	February 5, 2004
First Named Inventor:	Robert E. Dye
Art Unit:	2122
Examiner Name:	Unknown
Attorney Docket Number:	5150-38605

NON PATENT LITERATURE DOCUMENTS

Examiner Initials*	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, (page(s), volume-issue number(s), publisher, city and/or country where published.	Check if English Translation is attached
		Alta Group of Cadence Design Systems, Inc., 1995, 34 pages.	<input type="checkbox"/>
		Code Generation System Product Data Sheet, 1994, 8 pages.	<input type="checkbox"/>
		SPW/CGS Porting Kits Product Data Sheet, 11/94, 2 pages.	<input type="checkbox"/>
		MultiProx for SPW Product Data Sheet, 08/94, 4 pages.	<input type="checkbox"/>
		DSP ProCoder for SPW Product Data Sheet, 11/94, 4 pages.	<input type="checkbox"/>
		Xanalog Corporation Sales Manual, January 1987, 8 pages.	<input type="checkbox"/>
		Available XA-1000 Literature and Its Use, 1986, 2 pages.	<input type="checkbox"/>
		Xanalog, XA-1000 Programming ICONS, 1986, 26 pages.	<input type="checkbox"/>
		Xanalog's CAE System: The Fastest AT Alive, Mass High Tech, Vol. 4, No. 22, 08/1988, 1 page.	<input type="checkbox"/>
		Xanalog The Computer Aided Engineering Workstation Comes to Simulation, Simulation Vol. 47, No. 1, July 1986, 3 pages.	<input type="checkbox"/>
		Xanalog RT Real Time Analog and Digital I/O, 10/90, 4 pages.	<input type="checkbox"/>
		Xanalog/SC+, 9/90, 4 pages.	<input type="checkbox"/>
		Xanalog Specializing in Workstations for Continuous Dynamic Simulation, 1987, 24 pages.	<input type="checkbox"/>
		Xanalog Real-Time User Guide, 1994, 28 pages.	<input type="checkbox"/>
		LEE et al., "Gabriel: A Design Environment for Programmable DSPs", 11/7/1988, 13 pages.	<input type="checkbox"/>
		LEE et al., "A Design Tool for Hardware and Software for Multiprocessor DSP Systems", May 1989, 4 pages.	<input type="checkbox"/>
		Gabriel 0.7 Overview, 1990, 5 pages.	<input type="checkbox"/>
		JOSEPH T. BUCK and EDWARD A. LEE, "Scheduling Dynamic Dataflow Graphs with Bounded Memory Using the Token Flow Model", http://www.synopsys.com/ , 1995, 4 pages.	<input type="checkbox"/>
		EDWARD A. Lee, "Design Methodology for DSP", 1992, 4 pages.	<input type="checkbox"/>
		PINO et al, "Interface Synthesis in Heterogeneous System-Level DSP Design Tools", 05/1996, 4 pages.	<input type="checkbox"/>
		JOSE LUIS PINO, Master's Report, "Software Synthesis for Single-Processor DSP Systems Using Ptolemy", May 1993, 48 pages.	<input type="checkbox"/>
			<input type="checkbox"/>

Examiner Signature		Date Considered	
-----------------------	--	-----------------	--

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to application. ¹Applicant's unique citation designation number (optional).



Substitute for form 1449/PTO Modified

Complete if Known

**INFORMATION DISCLOSURE
STATEMENT BY APPLICANT**
(Use as many sheets as necessary)

Application Number: 10/772,518
Confirmation No.: 5410
Filing Date: February 5, 2004
First Named Inventor: Robert E. Dye
Art Unit: 2122
Examiner Name: Unknown
Attorney Docket Number: 5150-38605

NON PATENT LITERATURE DOCUMENTS

Examiner Initials*	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, (page(s), volume-issue number(s), publisher, city and/or country where published.	Check if English Translation is attached
		ASAWAREE KALAVADE and EDWARD A. LEE, "A Hardware-Software Codesign Methodology for DSP Applications", 1993, 12 pages.	<input type="checkbox"/>
		PINO et al., "Automatic Code Generation for Heterogeneous Multiprocessors", 1994, 4 pages.	<input type="checkbox"/>
		"Tool Chest continues to Grow", Electronic Engineering Times, 12/15/1995, 2 pages.	<input type="checkbox"/>
		PINO et al., "Mapping Multiple Independent Synchronous dataflow Graphs onto Heterogeneous Multiprocessors", 10/1994, 6 pages.	<input type="checkbox"/>
		ASAWAREE KALAVADE and EDWARD A. LEE, "Hardware/Software Co-Design Using Ptolemy - A Case Study", 09/1992, 18 pages.	<input type="checkbox"/>
		PINO et al., "Software Synthesis for DSP Using Ptolemy", 1995, 15 pages.	<input type="checkbox"/>
		Vol. 1 - Ptolemy 0.7 User's Manual, 1997, 532 pages.	<input type="checkbox"/>
		i-Logix Product Overview, 1996, 52 pages.	<input type="checkbox"/>
		Press Release, "i-Logix Statemate MAGNUM Supports PCs", 01/31/1997, 2 pages.	<input type="checkbox"/>
		Press Release, "i-Logix Signs Reseller Agreement for Virtual Prototypes, Inc.'s VAPS Product Line", 02/11/1997, 2 pages.	<input type="checkbox"/>
		Press Release, "i-Logix Introduces Rhapsody, Object-Oriented analysis, Design and Implementation Tool", 02/10/1997, 2 pages.	<input type="checkbox"/>
		Statement/C Product Overview, 1995, 4 pages.	<input type="checkbox"/>
		Press Release, "i-Logix and Integrated Systems Link Statemate MAGNUM and MATRIX AutoCode" 01/03/1997, 2 pages	<input type="checkbox"/>
		Press Release, "i-Logix and Wind River unveil Industry's First Rapid Prototyping Solution for Testing Embedded Systems at ESC West in San Jose", 09/17/1996, 3 pages.	<input type="checkbox"/>
		Press Release, "i-Logix Inc. Endorses Unified Modeling Language", 01/16/1997, 1 page.	<input type="checkbox"/>
		PHILIP DEAN LAPSLEY, "Host Interface and Debugging of Dataflow DSP Systems", Thesis, 1991, pgs. 1-51.	<input type="checkbox"/>
		LEE et al., "Gabriel: A Design Environment for Programmable DSPs", 1988, pgs. 1-11.	<input type="checkbox"/>
			<input type="checkbox"/>

Examiner Signature		Date Considered	
--------------------	--	-----------------	--

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to application. ¹Applicant's unique citation designation number (optional).

Substitute for form 1449/PTO Modified		Complete if Known	
INFORMATION DISCLOSURE STATEMENT BY APPLICANT <i>(Use as many sheets as necessary)</i>		Application Number	10/772,518
		Confirmation No.:	5410
		Filing Date:	February 5, 2004
		First Named Inventor:	Robert E. Dye
		Art Unit:	2122
		Examiner Name:	Unknown
		Attorney Docket Number:	5150-38605
NON PATENT LITERATURE DOCUMENTS			
Examiner Initials*	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, (page(s), volume-issue number(s), publisher, city and/or country where published.	Check if English Translation is attached
		LEE et al., "Gabriel: A Design Environment for DSP", IEEE Transactions on Acoustics, Speech, and Signal Processing, Vol. 37, No. 11, Nov. 1989, pgs. 1751-1762.	<input type="checkbox"/>
		BIER et al., "Gabriel: A Design Environment for DSP", IEEE Micro Issue - Vol. 10, No. 5, 1990, pgs. 28-45.	<input type="checkbox"/>
		LUDOLPH et al., "The Fabrik Programming Environment", IEEE, pages 222-230, 1988.	<input type="checkbox"/>
		International Search Report for PCT/US 98/10916 dated 9/17/98.	<input type="checkbox"/>
		DOUGLAS, BRUCE D., Ph.D., "Custom Embedded Communication Protocols, Conference Proceedings of Embedded Systems Conference East, March 10-12, 1997, Boston, Massachusetts, pp. 637-657.	<input type="checkbox"/>
		LABROSSE, JEAN, "Inside Real-Time Kernels," Conference Proceedings of Embedded Systems Conference East, March 10-12, 1997, Boston, Massachusetts, pp. 205-214.	<input type="checkbox"/>
		LABROSSE, JEAN, "Designing with Real-Time Kernels," Conference Proceedings of Embedded Systems Conference East, March 10-12, 1997, Boston, Massachusetts, pp. 379-389.	<input type="checkbox"/>
		Operating Systems, 2 nd Ed. By Williams Stallings, Prentice Hall, 1995, "Multiprocessor and Real-Time Scheduling", pp. 394-415.	<input type="checkbox"/>
		SHEARMAN, SAM, Assoc. Editor, "Hardware-in-the-loop connectivity extends continuous-system simulation", Personal Engineering, June 1997, pp. 18-37.	<input type="checkbox"/>
		XIAO-YU, et al., "Software Environment for WASMII: A Data Driven Machine with a Virtual Hardware," Field Programmable Logic Architectures, Synthesis and Applications, 4 th International Workshop on Field-Programmable Logic and Applications, FPL '94 Proceedings, Berlin, Germany, 1994.	<input type="checkbox"/>
		EDWARDS, et al., "Software acceleration using programmable hardware devices," IEEE Proceedings: Computers and Digital Techniques, vol. 143, no. 1, January 1996, pp. 55-63.	<input type="checkbox"/>
		LEESER, et al, "High Level Synthesis and Generating FPGAs with the BEDROC System," Journal of VLSI Signal Processing, vol. 6, no. 2, August 1993, pp. 191-214.	<input type="checkbox"/>
		International Search Report for PCT/US 98/13040 mailed 12/22/98.	<input type="checkbox"/>
		"LabVIEW USER MANUAL for Windows", National Instruments Co., 09/1994 pp 4/1-21.	<input type="checkbox"/>

Examiner Signature		Date Considered	
-----------------------	--	-----------------	--

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to application. ¹Applicant's unique citation designation number (optional).

Substitute for form 1449/PTO-Modified		Complete if Known	
INFORMATION DISCLOSURE STATEMENT BY APPLICANT <i>(Use as many sheets as necessary)</i>		Application Number	10/772,518
		Confirmation No.:	5410
		Filing Date:	February 5, 2004
		First Named Inventor:	Robert E. Dye
		Art Unit:	2122
		Examiner Name:	Unknown
		Attorney Docket Number:	5150-38605
NON PATENT LITERATURE DOCUMENTS			
Examiner Initials*	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, (page(s), volume-issue number(s), publisher, city and/or country where published.	Check if English Translation is attached
		BEGUELIN et al., "Visualization and Debugging in a Heterogenous Environment", IEEE, 06/1993, pp 88-95.	<input type="checkbox"/>
		JAMAL et al., "The Applicability of the Visual Programming Language LabVIEW to Large Real-World Application", IEEE, 1995, pp 99-106.	<input type="checkbox"/>
		PER-ARNE WIBERG, "Graphical Programming of Time-Deterministic Real-Time Systems", IEEE, 1996, pp 173-180.	<input type="checkbox"/>
		ADE, M; LAUWEREINS, R; PEPERSTRAETE, J.A.; Hardware-Software Codesign with GRAPE, Proceedings of the Sixth IEEE International Workshop on Rapid System Prototyping, 6/9/95, pp. 40-47.	<input type="checkbox"/>
		LAUWEREINS, R; ENGELS, M; ADE, M; PEPERSTRAETE, J; Grape-II: A System-Level Prototyping Enrironment for DSP Applications, Computer, Vol. 28, Issue 2, 2/95, pp. 35-43.	<input type="checkbox"/>
		WEBAN, A., BROWN, G. "A Software Development System forFPGA-based Data Acquisition Systems", FPGAs for Custom Computing Machines, 1996	<input type="checkbox"/>
		International Search Report, Application No.: PCT/US00/22317, mailed December 19, 2000	<input type="checkbox"/>
		SHAHEEN et al., "Remote Laboratory Experimentation", IEEE, Proceeding of American Control Conference, Pages: 1326-1329, June 1998	<input type="checkbox"/>
		GILLET et al., "Telepresence: An Opportunity to Develop Real-World Experimentation Education", CiteSeer, Pages: 1-6, 1997	<input type="checkbox"/>
		JOHNSTON et al., "High-Speed Distributed Data Handling for On-Line Instrumentation Systems", Lawrence Berkeley National Laboratory, pages 1-19, August 1997	<input type="checkbox"/>
	A1	MARIO ŽAGAR, IGOR ČAVRAK and ARMIN STRANJAK; "CORBA-based Remote Instrumentation"; 9 th Mediterranean Electrotechnical Conference (MELECON); May 1998; pages 1294-1298; Vol. 2; Tel-Aviv.	<input type="checkbox"/>
			<input type="checkbox"/>
			<input type="checkbox"/>
			<input type="checkbox"/>
			<input type="checkbox"/>

Examiner Signature		Date Considered	
-----------------------	--	-----------------	--

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to application. ¹Applicant's unique citation designation number (optional).